

## Public Comment CE192-16 WILLIAMS-B :

Proponent : Jeremiah Williams, representing U. S. Department of Energy  
(jeremiah.williams@ee.doe.gov) requests Approve as Modified by this Public Comment.

Modify as Follows:

### 2015 International Energy Conservation Code

**C405.2.3 Daylight-responsive controls.** *Daylight-responsive controls* complying with Section C405.2.3.1 shall be provided to control the electric lights within *daylight zones* in the following spaces:

1. Spaces with a total of more than 150 watts of *general lighting* within sidelight *daylight zones* complying with Section C405.2.3.2. *General lighting* does not include lighting that is required to have specific application control in accordance with Section C405.2.4.
2. Spaces with a total of more than 150 watts of *general lighting* within toplight *daylight zones* complying with Section C405.2.3.3.
3. **Exception:** *Daylight responsive controls* are not required for the following:
  1. Spaces in health care facilities where patient care is directly provided.
  2. Dwelling units and sleeping units.
  3. Lighting that is required to have specific application control in accordance with Section C405.2.4.
  4. Sidelight *daylight zones* on the first floor above grade in Group A-2 and Group M occupancies.
  5. New buildings not greater than 50,000 square feet in conditioned floor area where the total connected lighting power calculated under Section C405.4.1 is not greater than the adjusted interior lighting power allowance (*LPAadj*) calculated in accordance with Equation 4-9:

$$LPA_{adj} = \{LPA_{norm} \cdot \{ [1.0 - (0.4 \cdot UDZFA / TBFA)] \}$$

(Equation 4-9)

where:

*LPAadj* = Adjusted building interior Lighting Power Allowance in Watts

*LPA<sub>norm</sub>* = Normal building Lighting Power Allowance in Watts calculated in accordance with Section C405.4.2 and reduced in accordance with Section C406.3 where option 2 is used to comply with the requirements of Section C406.

*UDZFA* = Uncontrolled *daylight zone* floor area is the sum of all sidelight and toplight *daylight zones*, calculated in accordance with Sections C405.2.3.2 and C405.2.3.3, that do not have *daylight responsive controls*.

*TBFA* = Total building floor area is the sum of all floor areas included in the Lighting Power Allowance calculation in

## Section C405.4.2.

### **Commenter's Reason:**

Buildings larger than 50,000 square feet generally have a lighting design professional engaged who can properly design and commission daylighting controls.

The original proposal is intended to benefit smaller buildings where implementing an effective daylighting design may be more difficult. This public comments restricts the LPD for daylighting tradeoff to new buildings smaller than 50,000 square feet.

There is also a minor change to the formula to make it clear how to apply it.